

AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the captioned Application:

LISTING OF CLAIMS:

Claim 1 (previously presented) An apparatus for continuous cold sterilization of a fluid, the apparatus comprising at least one ultraviolet radiation source and at least one duct, through which the fluid flows, permeable to such radiation, the duct having a portion that extends helically about the source, wherein the helical portion is arranged in a chamber, the walls of the chamber having reflective surfaces, the distance between the walls and the helical portion being sufficient to allow circulation of air therebetween, the helical portion of the duct having an elliptically-shaped passage section, the major axis of which is generally perpendicular to the direction of irradiation.

Claim 2 (previously presented) The apparatus set forth in claim 1, wherein air circulation slits are formed on the walls of the chamber.

Claim 3 (previously presented) The apparatus set forth in claim 1, wherein the distance between the walls of the chamber and the helical portion is at least about 5 mm.

Claim 4 (previously presented) The apparatus set forth in claim 1, wherein the ultraviolet radiation source is tubular-shaped and the major axis of the elliptical section of the helical portion is generally parallel to the longitudinal axis of the source.

Claim 5 (currently amended) The apparatus set forth in claim 1, wherein an indicator light is provided outside the chamber [is connected] optically [to] engaged with the ultraviolet radiation source through an optical fiber [placed] either in contact with the lamp or within its vicinity.

Claim 6 (new) An apparatus for continuous cold sterilization of a fluid, the apparatus comprising at least one ultraviolet radiation source and at least one duct, through which the fluid flows, permeable to such radiation, the duct having a portion that extends helically about the source, wherein the helical portion is arranged in a chamber, the walls of the chamber having reflective surfaces, the distance between the walls and the helical portion being sufficient to allow circulation of air therebetween, the helical portion of the duct having an elliptically-shaped passage section, the major axis of which is generally perpendicular to the direction of irradiation, the apparatus further including air circulation slits formed on the walls of the chamber, and an indicator light outside the chamber optically engaged with the ultraviolet radiation source through an optical fiber either in contact with the lamp or within its vicinity.